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# Wild Rice



CANADA DEPARTMENT OF AGRICULTURE

## WILD RICE

Wild rice originally grew only in some streams and lakes in southern Canada, from eastern Manitoba to central Quebec. As a result of extensive planting in recent years, it now grows in many more places and over a wider area. Its grain is the largest produced on any of our wild grasses and has a food value equal to that of the cultivated cereals. Consequently it proves valuable as a food for wild fowl, especially ducks, as well as for humans.

As yet, no attempt has been made to cultivate wild rice on arable land, but many persons are interested in establishing stands as a source of feed and shelter for water fowl and muskrats. Sportsmen, in particular, are eager to get wild rice growing in their favorite hunting grounds to attract game birds.

***The Wild Rice Plant:*** Wild rice is an annual grass and depends on seed to propagate itself from year to year. It grows only in shallow water (up to 4 feet deep) in slow streams and rivers and along the shores of certain lakes. In natural stands, and in stands well established after planting, enough seeds usually drop into the water each fall to give a good crop the next year. In good stands, the plants often grow so closely together that they keep out other water plants and form such dense masses that it is difficult for persons engaged in harvesting to penetrate them in a boat.

There are many lakes and other bodies of water in Canada where wild rice does not naturally occur, and where attempts to grow it have often resulted in failure. The failure may be due to the nature of the bottom or the chemical composition of the water, but in many cases the cause is not well understood.

***Planting Wild Rice:*** For planting, obtain fresh viable seed. To do this gather seed from wild stands in early September or buy it from a regular dealer in wild rice seed. The ripe seed must be planted without delay because it loses its viability if it dries for more than a few days. It is not possible to store the seed



over winter in a dry bag or bin for planting in the spring. Some dealers, however, keep seed continually cool and wet under special conditions to have it available for spring sowing.

Plant wild rice by simply casting the seed into the water at the place where you want it to grow. If the kernels are well filled, they will immediately sink to the bottom and bury themselves in the mud. If the hull is empty, it will float away on the surface. In some years there is a high proportion of unfilled kernels or insect-damaged grains.

Broadcast the seed widely from a steady row-boat or canoe. Good coverage is seldom achieved by throwing it from the shore, but this can be accomplished to some extent by making mud-balls containing a few seeds each and casting them into the water.

To start a stand, about 20 pounds of seed should be enough for an acre of water surface. If conditions for growth are suitable, the plants will appear the first year; also, if conditions are suitable, the plants should flower and produce enough seed to give a denser stand in the following year. Once it becomes well established, the stand will continue to perpetuate itself.

**Where to Plant:** A soft, silty or muddy bottom seems to be best for wild rice. Such conditions are generally found in shallow bends or below sandbars in rivers and streams. The water in protected coves and shallow bays of lakes, just outside the zone of cattails and among the water lilies, is generally a good spot to plant. Around the small delta where a spring or stream enters a lake, or around the outlet (if the current is not too fast) are also likely places.

Open shore lines exposed to waves or strong currents are not satisfactory. Wild rice will not grow in the shade of overhanging trees or amongst dense marsh vegetation. Small bog-margined lakes do not seem to support strong stands. Salt-water marshes and lagoons along the seacoast also are not suitable.

**Description of the Plant:** The seed germinates in the spring and first sends up soft ribbonlike leaves which reach and float out on the surface. Soon after, the upright stems, well rooted in the mud, come up and grow above the surface to a height of 2 to 7 feet, depending on the variety and conditions. Flowering starts in August and seeds begin to ripen in late August and early September. Only a few seeds are produced on each plant and these fall as soon as they ripen. It is difficult to harvest the complete crop of seed at any one time.

The kernel is  $\frac{1}{2}$  inch to 1 inch long and is enclosed in a firm hull with a long rough bristle at the tip. The kernel is soft and rubbery, and greenish brown in color when ripe, but turns brittle and dark brown or black on drying. For human food the grain is first roasted, then the hulls are threshed off and cleaned out by winnowing. It is cooked in various ways, but its most popular use is as a stuffing for roast wild duck.

Different varieties of wild rice occur in nature, but all belong to one species known botanically as Zizania aquatica. The varieties vary in size, number of flowers, texture of the hull, and size of grain. Originally they grew in separate parts of Canada. Numerous other grasses, sedges and rushes growing along shores may easily be mistaken for wild rice. If you are not sure if a plant is wild rice send a specimen of the plant, or at least of part of the stem with head and leaves attached, flattened and dried between sheets of newspaper, to the Plant Research Institute, Research Branch, Canada Department of Agriculture, Ottawa, Ontario, where your specimen will be identified.

Copies of this publication may be obtained from:

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